

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior listings and versions of claims in the application.

CLAIMS:

1-100 (canceled)

101. (currently amended) A kit set of reagents, comprising:

- a) a thermostable cleavage agent;
- b) a first oligonucleotide comprising: i) a charged adduct, and ii) a portion completely complementary to a first region of a target nucleic acid; and
- c) a second oligonucleotide comprising a 3' portion and a 5' portion, said 5' portion completely complementary to a second region of said target nucleic acid downstream of and contiguous to said first portion region.

102. (currently amended) The kit set of reagents of Claim 101, wherein said 3' portion of said second oligonucleotide comprises a 3' terminal nucleotide not complementary to said target nucleic acid.

103. (currently amended) The kit set of reagents of Claim 101, wherein said 3' portion of said second oligonucleotide consists of a single nucleotide not complementary to said target nucleic acid.

104. (currently amended) The kit set of reagents of Claim 101, wherein said kit further comprises a solid support.

105. (currently amended) The kit set of reagents of Claim 104, wherein said first oligonucleotide is attached to said solid support.

106. (currently amended) The kit set of reagents of Claim 104, wherein said second oligonucleotide is attached to said solid support.

107. (currently amended) The kit set of reagents of Claim 101, wherein said cleavage agent comprises a structure-specific nuclease.

108. (canceled)

109. (currently amended) The ~~kit~~ set of reagents of Claim 101, wherein said cleavage agent comprises a 5' nuclease.

110. (canceled)

111. (currently amended) The ~~kit~~ set of reagents of Claim 109, wherein a portion of the amino acid sequence of said nuclease is homologous to a portion of the amino acid sequence of a thermostable DNA polymerase derived from a thermophilic organism.

112. (currently amended) The ~~kit~~ set of reagents of Claim 101, further comprising a buffer solution.

113. (currently amended) The ~~kit~~ set of reagents of Claim 101, further comprising providing a third oligonucleotide complementary to a third ~~portion~~ region of said target nucleic acid upstream of said first ~~portion~~ region of said first target nucleic acid.

114. (currently amended) The ~~kit~~ set of reagents of Claim 101, further comprising said target nucleic acid.

115. (currently amended) The ~~kit~~ set of reagents of Claim 101, further comprising a second target nucleic acid.

116. (currently amended) The ~~kit~~ set of reagents of Claim 101, wherein said charged adduct comprises a linker.

117. (currently amended) The ~~kit~~ set of reagents of Claim 101, wherein said charged adduct comprises a detectable molecule.

118. (currently amended) The ~~kit~~ set of reagents of Claim 117, wherein said detectable molecule is Cy3, Cy5, a fluorescent dye, ethidium bromide, (1,3-propanediamino)-propidium, (diethylenetriamino)-propidium, thiazole orange, (N-N'-tetramethyl-1,2-ethanediamino)-propyl thiazole orange, (N-N'-tetramethyl-1,3-propanediamino)-propyl thiazole orange, TOTAB, TOTO, EthD, TOED1, TOED2, or FED.

119. (currently amended) The ~~kit~~ set of reagents of Claim 117, wherein said detectable molecule comprises fluorescein.

120. (currently amended) The ~~kit~~ set of reagents of Claim 101, wherein said charged adduct comprises at least one amino acid.

121. (currently amended) The ~~kit~~ set of reagents of Claim 120, wherein said at least one amino acid is lysine, arginine, aspartate, or glutamate.

122. (currently amended) The ~~kit~~ set of reagents of Claim 101, wherein said charged adduct comprises at least one amino-modified base.

123. (currently amended) The ~~kit~~ set of reagents of Claim 101, wherein said charged adduct is located at the 5' end of said first oligonucleotide.

124. (currently amended) The ~~kit~~ set of reagents of Claim 101, wherein said first oligonucleotide comprises an uncleavable region.

125. (currently amended) The ~~kit~~ set of reagents of Claim 124, wherein said charged adduct is attached to said uncleavable region of said first oligonucleotide.